Lake Perris and Perris Dam Fact Sheet

Roles and Responsibilities:

Owner:	California Department of Water Resources (DWR) Division of Operations and Maintenance
Engineer:	DWR Division of Engineering
State Regulator:	DWR Division of Safety of Dams
Water Contractor:	Metropolitan Water District of Southern California
Camping, Parks and Recreation:	California Department of Parks and Recreation
Fishing and Wildlife:	California Department of Fish and Game
Boating:	California Department of Boating and Waterways

Issue

Engineers in the Department of Water Resources (DWR), with support from expert consultants, have identified potential seismic safety risks under a section of the foundation of Perris Dam.

There is no imminent threat to life or property, but DWR is taking steps to ensure maximum public safety while further analysis, feasibility studies, design work, environmental review and repairs are completed.

Background

DWR is required by state law to hire independent scientific experts to evaluate the safety of all State Water Project dams, including Perris Dam. One of these independent evaluations recommended that DWR reanalyze the seismic stability of Perris Dam. An extensive review of existing data, new geotechnical explorations, and engineering analyses was conducted.

The study identified seismic weaknesses under a section of the foundation of the dam, suggesting that major damage and uncontrolled water releases could occur in a major earthquake. In response, the lake level has been reduced to 27 feet below the crest of the dam, reducing reservoir storage by about 42 percent and surface area by about 18 percent.

Next Steps

In early October 2005, an Independent Consulting Board reviewed and reaffirmed DWR's findings. DWR will now move forward with plans to repair Perris Dam.

The lake will remain at the lower level for several years while work on the feasibility studies, design, environmental review and repairs are performed.

DWR will continue to work closely with the other involved agencies, including the Department of Parks and Recreation, Department of Fish and Game, and Department of Boating and Waterways, and the Metropolitan Water Districts of Southern California.

For more information, visit www.perrisdam.water.ca.gov

Lake Perris Facility Information

Location

Northwestern Riverside County, approximately 13 miles southeast of the City of Riverside and about 65 miles east of of Los Angeles.

Owner California State Department of Water Resources

Period Built 1970 to 1974

Perris Dam

Type:	Zoned Earthfill
Embankment Volume:	20,000,000 cubic yards
Height:	128 feet
Crest Elevation:	1,600 feet
Crest Length:	11,600 feet
Crest Width:	40 feet

Lake Perris

Maximum Operating Water Surface Elevation:	1,588 feet
Minimum Operating Water Surface Elevation:	1,540 feet
Storage at Spillway Crest Elevation:	131,452 acre-feet
Maximum Operating Storage (@ Elev. 1588):	126,841 acre-feet
Minimum Operating Storage (@ Elev. 1540):	37,013 acre-feet
Shoreline at Spillway Crest Elevation:	10 miles
Surface Area at Spillway Crest Elevation:	2,318 acres
Surface Area at Maximum Operating Elevation:	2,292 acres
Surface Area at Minimum Operating Elevation:	1,540 acres

Spillway

Type:	Ungated ogee crest with concrete baffled chute and riprapped channel
Spillway Crest Elevation:	1,590 feet

Inlet Works

Type:	Buried 8-foot 6-inch concrete pipeline from terminus of Santa Ana Valley Pipeline above right abutment (looking downstream).
Capacity:	469 cubic feet per second

Outlet Works

Type:	12-foot 6-inch diameter lined tunnel under left abutment (looking downstream), with a steel delivery manifold.
Intake Structure:	Five-level vertical tower with 72-inch shutoff butterfly valves
Control:	Regulation of flow at delivery manifold by water users.
Design Delivery:	1,000 cubic feet per second
Blowoff Structure:	6-foot-wide by 12-foot-high slide gate downstream of delivery/ manifold with bolted bulkhead at downstream terminus.
Capacity:	3,800 cubic feet per second